

Florida Native Seed Strategy

Prepared by the Florida Native Seed Partnership

Acknowledgments

This draft Strategic Plan for the Florida Native Seed Partnership was prepared by the Florida Wildflower Foundation in collaboration with the University of Florida. We are grateful for the expertise, input, and guidance provided by contributors who reviewed and refined the content.

The Plan is designed as a living document that will grow stronger with the involvement of partners across agencies, organizations and the private sector. We look forward to working together to build the robust native seed system Florida needs.

DRAFT

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Executive Summary

The Florida Native Seed Partnership (FNSP), led by the Florida Wildflower Foundation (FWF), seeks to restore and conserve Florida's ecosystems by developing a sustainable and accessible native seed supply chain. This initiative aims to engage public and private partners to foster the native seed industry through research initiatives, education and knowledge transfer, public promotion, and agreements among partners.

The FNSP will build on FWF's commitment to native plant habitats by leveraging statewide collaborations to ensure native seeds and plants are available for restoration and landscaping projects, as well as ecological enhancement work geared towards pollinators and at-risk wildlife. Over the first five years, the partnership's primary goal is to expand the supply and availability of native seeds in Florida while strengthening the economic viability of the state's native seed market. By establishing a network of seed producers and collaborating with government agencies, nonprofits, municipalities and academic institutions, the FNSP is dedicated to ensuring the long-term health of Florida's unique biodiversity.



Mission

To grow and sustain a robust supply of affordable Florida native ecotype seeds produced by a profitable and responsible industry in the State of Florida (*La Florida*, the Land of Flowers) to facilitate ecological restoration, enhancement, and sustainable landscaping.

Vision

Florida's natural and urban landscapes are restored with ecologically appropriate native plants, ensuring the survival of endangered and endemic species, improving biodiversity, and enhancing the resilience of the state's natural habitats against climate change, invasive species and habitat loss.

Background and History

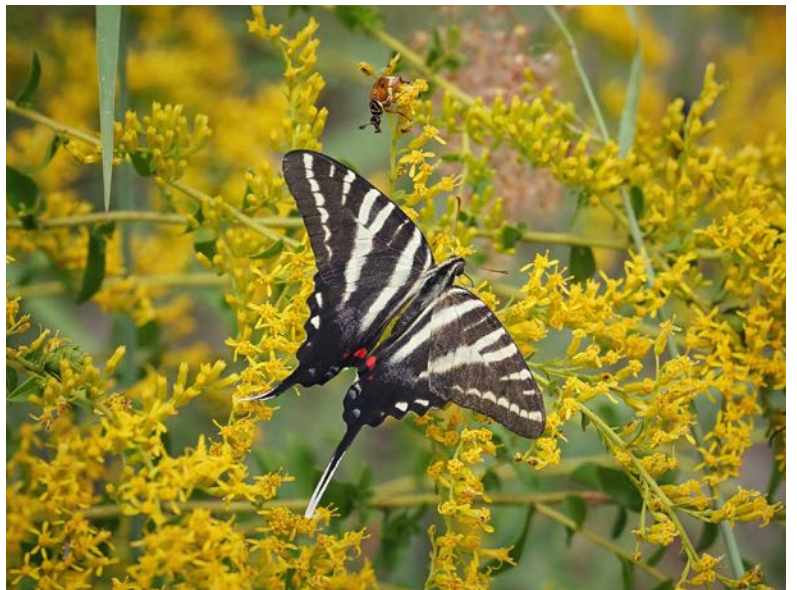
The Importance of Native Seeds

Native seeds are vital for conservation and restoration initiatives, serving as a foundational resource in efforts to restore and rehabilitate Florida's ecosystems. However, the current limitations in the supply of native seeds significantly hinders restoration projects, inflating costs and reducing opportunities for ecological enhancement.

The native plant nursery industry relies heavily on seeds to produce plant materials for landscaping and restoration efforts. Unfortunately, constraints in the selection and availability of native seeds lead to increased costs and diminished access to native plants in the market, which particularly impacts ecological projects in urban areas.

Native plants play a crucial role in supporting pollinators, which are essential for the pollination of crops. By increasing the availability of native seeds, we can promote the growth and production of native plants, thereby enhancing pollinator populations that contribute to agricultural productivity.

Additionally, maintaining native plant cover along roadsides offers multiple benefits. It not only provides vital resources for pollinators but also enhances the aesthetic value of landscapes and reduces municipal mowing costs. Private landowners are increasingly interested in acquiring native seeds to improve habitats for wildlife and game species, further highlighting the demand for these critical resources.





Native Seed Supply in Florida

Despite the evident need, Florida's native seed supply remains underdeveloped, with barriers that restrict entry, limit expansion and ultimately suppress demand. Several factors contribute to this shortfall:

- **Limited number of seed growers:** The state has a small pool of seed growers, many of whom contain unique knowledge sets and are quickly aging out of the business, leading to a decline in production capacity.
- **Policy gaps:** Current policies regarding wild seed collection by private or joint-agency groups on public lands restrict harvesting significantly hindering efforts to expand seed sourcing.
- **Lack of collaboration:** Insufficient cooperation among public and private entities limits efforts to develop a large-scale supply of native seed to support restoration and ecological enhancement projects across the state.
- **Inadequate institutional support:** There is limited support from government institutions for research, education, and extension efforts that are critical for developing a robust native seed supply chain in Florida.

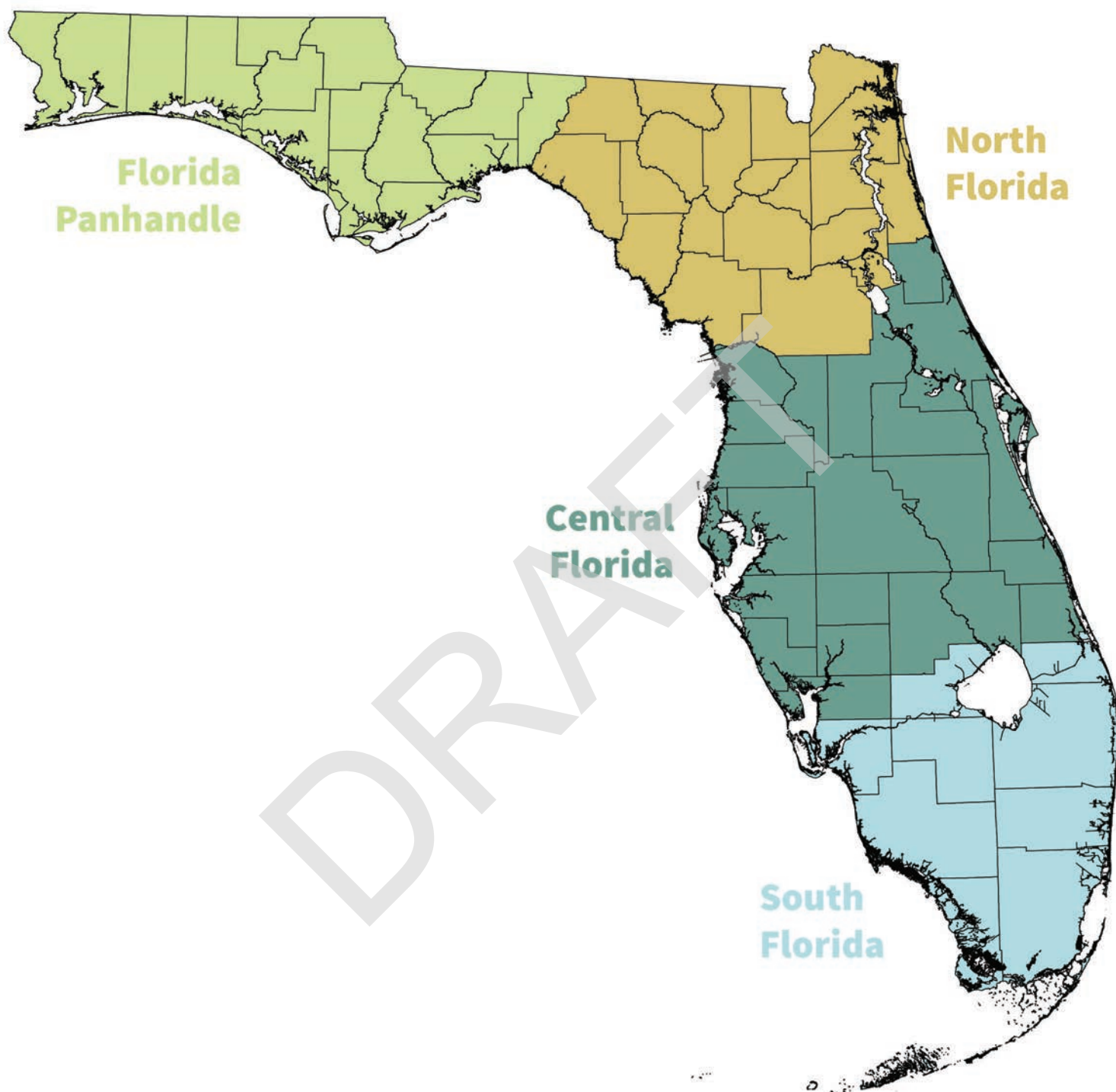


Figure 1. Geographic scope for the Florida Native Seed Partnership.

Guiding Values and Principles

The Florida Native Seed Partnership is committed to upholding the following core values and principles, which will guide all aspects of our work and decision-making:

- **Ecological integrity:** We prioritize the health and resilience of Florida's ecosystems, ensuring that all activities support the restoration and conservation of native plant communities.
- **Scientific rigor:** Our strategies and actions are based on sound scientific research, utilizing the best available knowledge to inform decision-making and ensure effective outcomes.
- **Genetic diversity:** We recognize the importance of maintaining genetic diversity in native plant populations and promote seed collection and propagation practices that preserve this diversity.
- **Collaboration and partnership:** We foster strong, inclusive partnerships with diverse stakeholders, including government agencies, academic institutions, non-profit organizations, private landowners, and seed producers, to achieve shared goals.
- **Productivity and efficiency:** We are committed to maximizing the impact of our efforts by operating with productivity and efficiency, using resources wisely, and continually striving to improve processes and outcomes.
- **Transparency and accountability:** We operate with transparency and accountability, ensuring our activities and decisions are open to scrutiny and that we are responsible stewards of resources.
- **Education and outreach:** We provide training and educational resources to farmers, restoration practitioners and diverse community groups, fostering widespread understanding and adoption of science-based principles and practices.
- **Economic sustainability:** We strive to develop a viable and sustainable native seed industry that supports local economies and provides economic opportunities for seed producers.
- **Ethical practices:** We adhere to ethical principles in all aspects of our work, including seed collection, production and distribution, ensuring that our activities are conducted responsibly and sustainably.
- **Adaptive management:** We embrace an adaptive management approach, continuously evaluating our progress and adjusting strategies to respond to changing conditions and new information.

Goals

1. Form Partnership

Establish a robust and sustainable statewide Native Seed Partnership to ensure reliable availability of ecologically appropriate seed.

2. Strengthen Partnership

Empower native seed producers through comprehensive support and sustainable supply chain development.

3. Commit to research

Drive applied research and innovation to advance native seed production and ecological restoration.

4. Enhance market

Cultivate a thriving and sustainable market for Florida native seeds, driving economic growth and ecological benefits.

5. Evolve Partnership

Establish effective communication, evaluation and adaptive management systems to ensure the Partnership's long-term success and impact.



Goal 1: Establish a robust and sustainable statewide native seed partnership to ensure reliable availability of ecologically appropriate seed.

Objective

Establish and maintain a well-connected, efficient statewide network of diverse seed producers and stakeholders to ensure a consistent, reliable supply of high-quality, locally adapted native seeds for ecological restoration, conservation projects, and the native plant industry.

Action items

1.1 Establish partnerships and form a steering committee.

- Build strong partnerships with a wide range of stakeholders (seed producers, conservation groups, government agencies, etc.). Create a cohesive steering committee to provide leadership and oversight to ensure goals and objectives are met.
- **Operational strategy:** Facilitate regular partner meetings and steering committee check-ins for continuous alignment. Develop a centralized communication platform to enhance collaboration.

1.2 Conduct statewide seed producer and stakeholder inventory.

- Develop a detailed inventory of seed producers (e.g., farmers, harvesters, nurseries, landowners), agencies, botanical gardens, universities and other organizations involved in native seed activities. The inventory will include contact information, production capacity, species expertise and geographic distribution.
- **Operational strategy:** Use this inventory to map production capacity, species expertise and geographic distribution. Ensure the inventory is digital and regularly updated, using it as a foundational resource for coordination.

1.3 Perform a detailed seed industry market analysis and demand forecasting.

- Conduct a thorough analysis of current and projected demand for native seeds, identify market gaps, and forecast future needs. The analysis will include species-specific demand, regional variations and market trends.
- **Operational strategy:** Analyze market trends for different seed sectors (restoration, landscaping, municipalities, etc.) to better target production and marketing efforts.

1.4 Develop a prioritized list of high-value, ecologically significant native species.

- Based on market analysis and ecological assessments, create a prioritized list of native species that are in high demand and have significant ecological value for restoration and conservation projects. This list will consider factors such as genetic diversity, local adaptation and habitat requirements.
- **Operational strategy:** Ensure that the list reflects regional demand and habitat-specific requirements. This will inform seed producer planning and market strategies.

1.5 Collaborate with seed producers on seed increase strategies.

- Work with seed producers to develop and implement seed increase strategies, such as sharing foundational seed materials, to expand production capacity and ensure genetic diversity.
- **Operational strategy:** Use long-term contracts to support scaling and stability for producers. Facilitate knowledge sharing through regional workshops and producer networks.

1.6 Help facilitate long-term contracts between native seed producers and users.

- Foster long-term, reliable relationships between seed producers and end-users, including government agencies, restoration projects and municipalities, through advance contracts with guaranteed purchases and support for specialized species, including seed development costs.
- **Operational strategy:** Implement a digital platform to connect seed producers with buyers. Explore advanced contracting options such as indefinite delivery indefinite quantity (IDIQ) agreements to provide market predictability for producers.



Goal 2: Empower native seed producers through comprehensive support and sustainable supply chain development.

Objective Provide targeted training, technical assistance and market access support to new and existing native seed producers, fostering a robust and sustainable supply chain of diverse, locally sourced seed materials that meet the demands of ecological restoration, conservation and the broader native plant industry.

Action items

2.1 Produce and distribute an updated Florida Native Seed Production Manual.

- Develop a comprehensive manual with detailed guidance on native seed production, region-specific cultivation techniques, and best management practices.
- **Operational strategy:** Ensure the manual includes updated guidelines based on research findings. Make it available in both digital and print formats, incorporating feedback from producers and stakeholders for continuous improvement.

2.2 Develop a foundation seed production site at UF/IFAS Plant Science Research and Education Unit (PSREU).

- Create a foundation seed production site to produce and distribute high-quality foundation seed material to producers.
- **Operational strategy:** Use this site for research purposes and educational outreach. Ensure coordination with local producers to distribute materials and gather feedback for improving production.

2.3 Develop a comprehensive Native Seed Producer Training and Certification Program.

- In collaboration with the Florida Wildflower Growers Cooperative, create and implement a training and certification program covering all aspects of native seed production, including seed collection, propagation, cultivation, harvesting, cleaning and marketing. Certification will recognize producers who meet established quality and ethical standards.



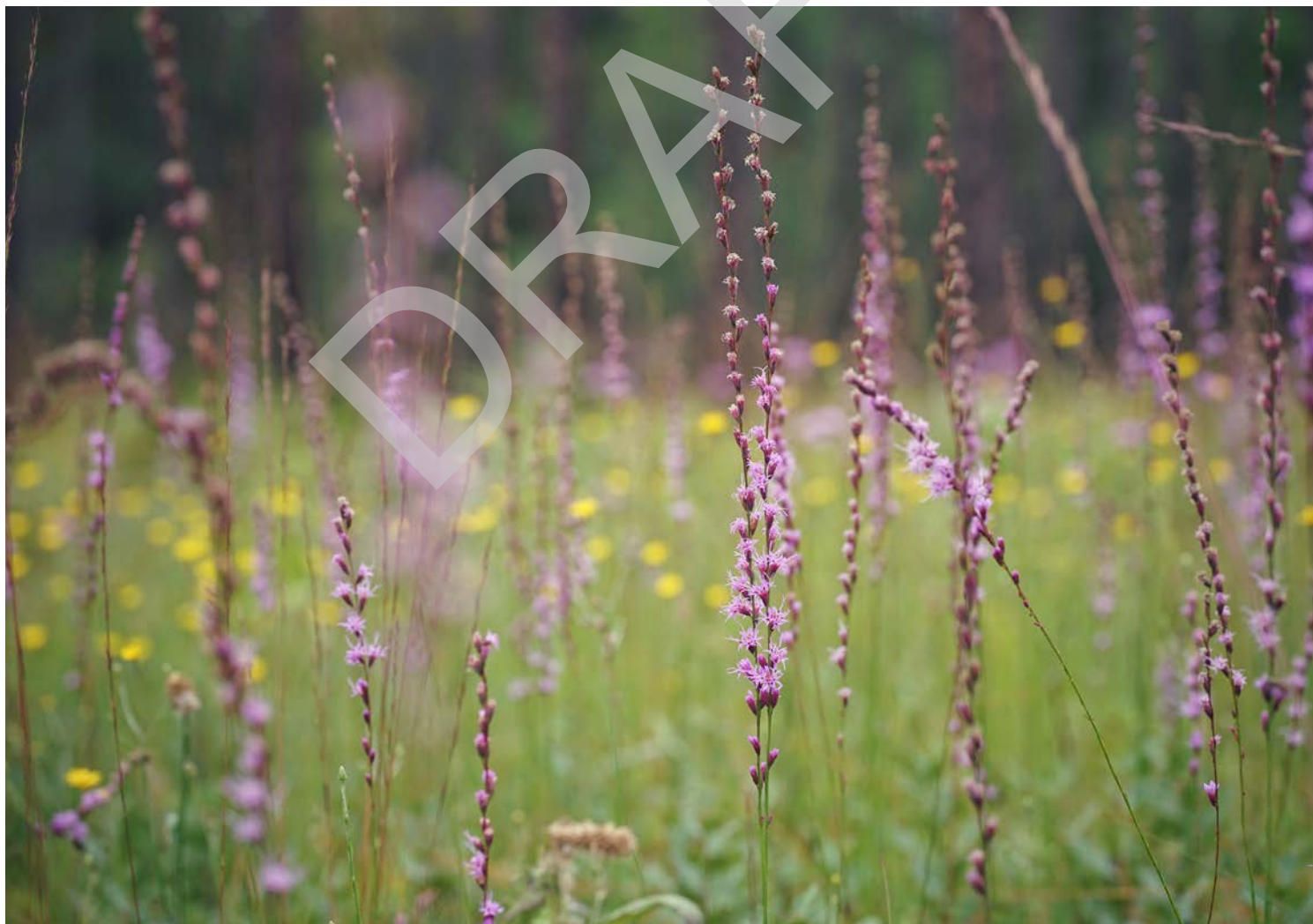
- **Operational strategy:** Integrate feedback from seed producers and researchers to tailor training modules to regional needs. Ensure certification is linked to market opportunities and quality standards.

2.4 Create an online interface to help connect native seed demand with supply.

- Develop a digital marketplace platform to connect native seed buyers and suppliers.
- **Operational strategy:** Ensure the platform facilitates efficient transactions, includes user ratings, and provides analytics on seed demand trends. Consider integrating it with existing state-run procurement systems.

2.5 Collaborate with agencies to create guidelines and a certification system for harvesting seed on public lands.

- Work with state agencies to establish clear guidelines for seed collection on public lands, ensuring sustainable and ethical harvesting practices, and develop a certification system for qualified harvesters.
- **Operational strategy:** Use the certification system to track harvesters' performance and adherence to sustainability standards. Maintain a database of certified harvesters for public and private landowners.



Goal 3: Foster research and innovation to advance native seed production and ecological restoration.

Objective Conduct and support targeted research on native seed production, collection, propagation and restoration techniques to address critical knowledge gaps and fostering innovation, ultimately improving the availability, quality and effectiveness of native seeds for ecological restoration and conservation.

Action items

3.1 Establish a collaborative research agenda based on industry and ecological priorities.

- Convene stakeholders, including researchers, seed producers and restoration practitioners, to identify key research priorities to address both industry and ecological needs.
- **Operational strategy:** Integrate findings from market analyses and ecological assessments into the research agenda. Promote collaboration through regional research hubs or working groups.

3.2 Conduct applied research on increasing seed production and availability of key “workhorse” species.

- Design and implement applied research projects focused on improving seed production and availability of selected “workhorse” species for restoration species, including propagation techniques, cultivation practices and harvesting methods.
- **Operational strategy:** Share research findings through website and other outreach tools. Prioritize species that address high-demand markets as identified in the seed demand forecasting.

3.3 Conduct genetic analyses and common garden studies to develop region-specific seed transfer guidelines.

- Research genetic diversity within key restoration species to improve seed transfer guidelines based on region-specific needs.



- **Operational strategy:** Ensure that findings are accessible via the digital repository and linked to seed production practices. Include genetic transfer guidelines for producers to inform seed collection strategies.

3.4 Develop and maintain a centralized repository of Florida-specific native seed production and restoration research.

- Create a digital repository of research findings, farming guides, field trial data and scientific publications.
- **Operational strategy:** Regularly update the repository with new research and best management practices. Integrate it with the online interface for easy access by seed producers, restoration practitioners and researchers.

3.5 Establish and manage a conservation seed banking program for priority sensitive species.

- Develop a program to collect, store and maintain seeds of priority conservation species to safeguard genetic diversity.
- **Operational strategy:** Integrate seed bank data with the broader seed network to ensure availability when needed. Develop guidelines for seed collection and storage protocols.



3.6 Conduct applied research to improve the efficiency and cost-effectiveness of native seed production at scale.

- Investigate production techniques that enhance efficiency and reduce costs for large-scale native seed production.
- **Operational strategy:** Share research outcomes with producers through workshops and online resources, aiming to increase adoption of best practices.

3.7 Develop and disseminate research-based best management practices for ecological restoration and enhancement.

- Translate research findings into practical best management practices for ecological restoration and enhancement.
- **Operational strategy:** Disseminate practices through publications, workshops and online tools. Ensure these resources are available to producers and restoration practitioners.



Goal 4: Cultivate a thriving and sustainable market for Florida native seeds, driving economic growth and ecological benefits.

Objective Expand market demand for Florida native seeds by engaging key industry partners, highlighting the economic benefits of sustainable seed farming, and developing innovative market strategies that support local economies while encouraging widespread adoption of native plants across diverse sectors.

Action items

4.1 Develop and implement targeted outreach and education campaigns for end users.

- Create educational materials, workshops and presentations to promote the benefits of Florida native seeds to key market sectors, including restoration professionals, landscapers, municipalities and landowners.
- **Operational strategy:** Use the website and digital platforms to promote educational content. Incorporate feedback from campaign participants to refine outreach strategies.

4.2 Create and promote economic incentive programs for farmers and landowners to engage in native seed production.

- Develop incentive programs, such as grants, tax credits or cost-sharing initiatives, to encourage participation from farmers and landowners in native seed production.
- **Operational strategy:** Partner with state agencies to integrate these programs into existing agricultural incentive structures.

4.3 Support regional native seed producer cooperatives and marketing networks.

- Strengthen existing cooperatives and networks by providing support to help seed producers collectively market their products and access larger markets.
- **Operational strategy:** Identify regional variations in demand and support distinct cooperatives where necessary, especially in areas like South Florida.

4.4 Develop and implement market strategies to increase native seed procurement by municipalities and public agencies.

- Create model procurement policies and best practice guidelines to encourage public agencies to prioritize native seeds in projects.
- **Operational strategy:** Establish a working group to engage municipalities and ensure consistent demand for native seeds through long-term contracts.

4.5 Develop and promote “Florida Native Seed” branding and certification programs to enhance market recognition.

- Create a recognizable branding and certification program for native seeds to build consumer confidence and increase market value by ensuring seed quality, traceability and regional origin.
- **Operational strategy:** Promote the program through digital channels and connect it to the marketplace for broader visibility.

Goal 5: Establish effective communication, evaluation and adaptive management systems to ensure the partnership's long-term success and impact.

Objective Develop and implement comprehensive communication strategies, rigorous evaluation frameworks, and adaptive management processes to effectively communicate the Florida Native Seed Partnership's goals, measure progress accurately, and ensure the strategy remains responsive to evolving needs and opportunities.

Action items

5.1 Develop and maintain a user-friendly website and digital platform for external communication and resource sharing.

- Create a digital platform to communicate the partnership's mission, goals and activities. Include a resource library, event calendar and updates.
- **Operational strategy:** Regularly update content and ensure the platform is interactive, with features for stakeholder feedback.

5.2 Establish regular partnership meetings and reporting mechanisms to facilitate internal communication and collaboration.

- Schedule regular meetings for steering committees, working groups and partner organizations. Develop standardized reporting mechanisms to ensure accountability.
- **Operational strategy:** Use a digital reporting system to track progress and maintain transparency. Provide summaries and actionable insights to stakeholders.

5.3 Develop and implement a comprehensive communication plan for engaging diverse stakeholders.

- Create a plan to engage different stakeholder groups using tailored messaging and communication channels.
- **Operational strategy:** Implement through website, newsletters, social media and direct communication. Track engagement metrics for continuous improvement.

5.4 Establish a robust monitoring and evaluation framework with measurable performance indicators.

- Develop a framework to measure progress and impact.
- **Operational strategy:** Use real-time data collection tools to monitor and evaluate progress against key performance indicators (KPIs). Adjust strategies as needed based on findings.

5.5 Conduct regular reviews of and updates to the Partnership's strategic plan based on evaluation findings and stakeholder feedback.

- Regularly review the strategic plan to assess its effectiveness and identify areas for improvement.
- **Operational strategy:** Use evaluation data to guide adaptive management and incorporate stakeholder feedback into the revision process.

Stakeholder and Partner Collaboration

Diverse stakeholders, including state and federal agencies, private sector businesses, non-governmental organizations, and educational and research institutions, are essential to building a thriving native seed industry.

Government agencies provide regulatory support and funding, facilitating large-scale restoration projects and promoting native seed use in public land management.

The private sector drives production and commercial distribution, supplying tailored seed mixes for various applications.

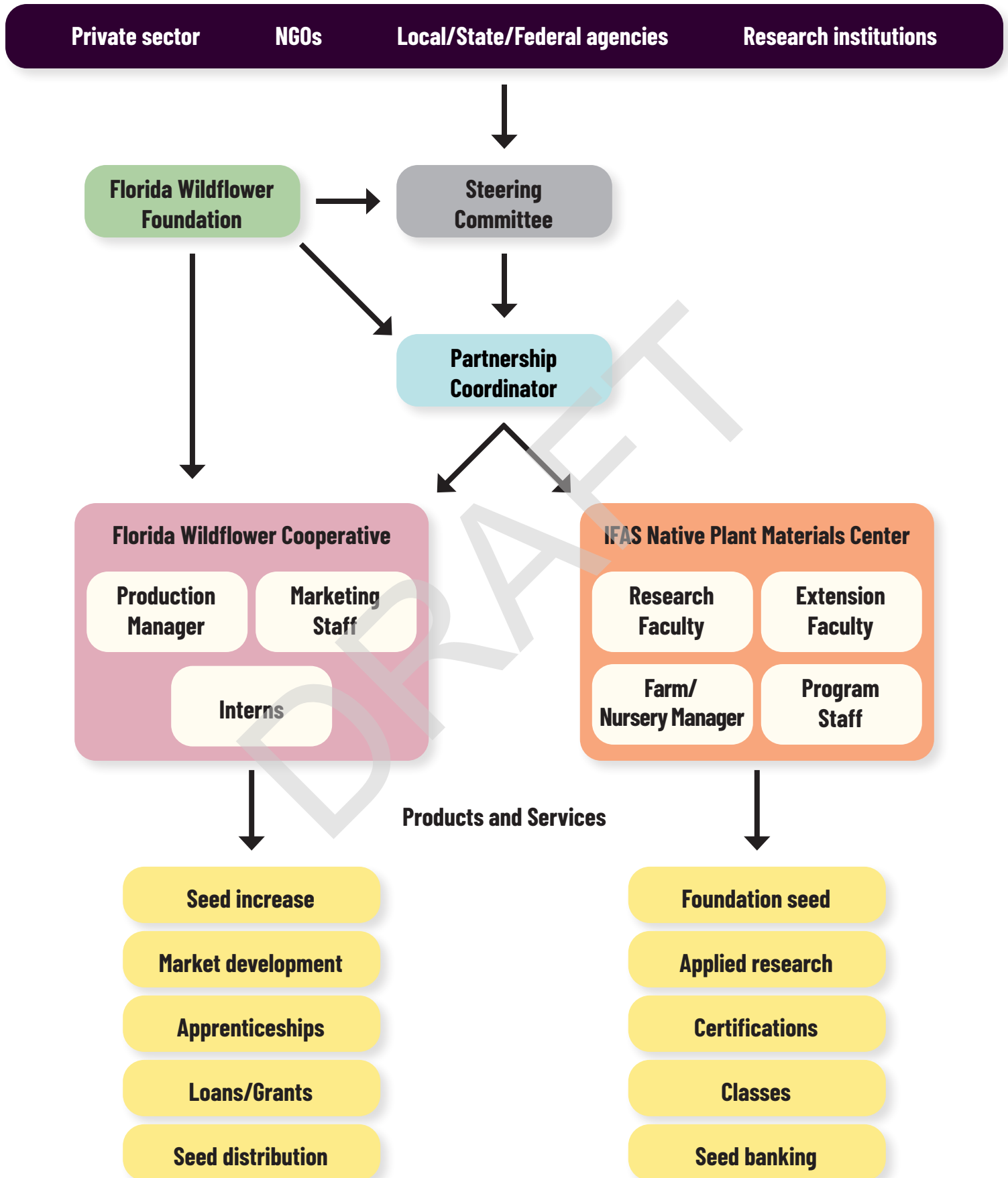
NGOs advocate for native seed use through restoration projects, education, and support for new producers.

Educational and research institutions contribute by advancing seed production and collection techniques and developing regionally appropriate planting mixes.

Collaboration across these sectors is essential to achieving shared goals of ecological restoration and sustainable native seed utilization, with each group bringing unique expertise and resources.



Florida Native Seed Partnership Organizational Structure



Organization and Position Descriptions

Steering Committee

The Florida Native Seed Partnership's Steering Committee provides strategic oversight, guiding the partnership's direction and ensuring alignment with its mission and goals. Consisting of seven to 13 members, the committee includes representatives from key stakeholder groups such as state and federal agencies, the Florida Wildflower Foundation, other non-governmental organizations, the private sector, and research institutions.

Its primary responsibilities include reviewing and approving strategic plans, monitoring progress towards objectives, facilitating inter-organizational collaboration, and advising on policy and funding priorities. The Steering Committee plays a vital role in fostering collaboration, ensuring effective communication, and driving the successful implementation of the partnership's initiatives, ultimately supporting the development of a robust and sustainable native seed industry in Florida.

Partnership Coordinator

The Partnership Coordinator plays a pivotal role in facilitating the effective operation and growth of the Florida Native Seed Partnership. Serving as the central point of contact, this individual ensures seamless communication and collaboration among diverse stakeholders, including state and federal agencies, private sector businesses, non-governmental organizations, and research institutions. Key responsibilities include coordinating Steering Committee meetings, managing working group activities, and tracking progress toward partnership goals.

The Coordinator is responsible for developing and implementing communication strategies; maintaining communication channels, including the partnership's website and social media platforms; and creating engaging content to reach diverse audiences. They will also support internal communications among partners to ensure timely and accurate information sharing. Additional responsibilities include supporting outreach efforts, assisting with funding opportunities, developing reports, and ensuring adherence to project timelines and deliverables.

By fostering a collaborative and productive environment, the Partnership Coordinator ensures the efficient implementation of the partnership's strategic plan and contributes to the long-term success of native seed initiatives across Florida.

Research Faculty

The Research Faculty position within the Florida Native Seed Partnership plays a critical role in advancing the scientific understanding and practical application of native seed production and restoration. This individual will lead and manage research projects in collaboration with diverse partners, leveraging the seed production farm and demonstration area at IFAS PSREU for field trials and experiments.

Key responsibilities include developing and implementing research on seed production, harvesting and the establishment of genetic or empirically based seed transfer zones to ensure the use of ecologically appropriate seed sources for restoration projects. The Research Faculty member will actively pursue federal research funding to support these initiatives and will contribute to the development of a native plant materials certificate program at the University of Florida, fostering education and training for future professionals.



Additionally, they will disseminate research findings through publications, presentations and workshops, contributing to the broader knowledge base on native seed science and restoration practices.

Extension and Teaching Faculty

The Extension and Teaching Faculty position is essential for bridging the gap between research and practical application within the Florida Native Seed Partnership. This role focuses on translating scientific knowledge into actionable strategies for stakeholders, particularly in seed production, collection and ecological restoration. Key responsibilities include developing and implementing a comprehensive extension program in collaboration with diverse partners, providing training, technical assistance and educational resources to seed producers, land managers and community groups.

Additionally, this faculty member will develop and teach a course at the University of Florida on native seed production and related topics, contributing to the education of future professionals. They will also conduct applied research on ecological enhancement, with a specific focus on establishing and maintaining wildflower meadows and pollinator habitats in both rural and urban environments. Research findings will be disseminated through extension publications, workshops and community outreach, promoting the adoption of best practices for native plant restoration.

Plant Materials Nursery and Seed Farm Manager

This position will be responsible for the direct management and operation of the seed production and demonstration farm at the PSREU. This role involves overseeing all aspects of seed and plant material production to ensure the availability of high-quality, genetically appropriate native plant resources.

Key responsibilities include managing the cultivation and maintenance of live plant materials, overseeing seed storage facility operations to maintain seed viability and longevity, and leading all seed harvesting, processing, cleaning, storage and distribution activities. A primary focus will be on the management and dissemination of foundation seed materials.

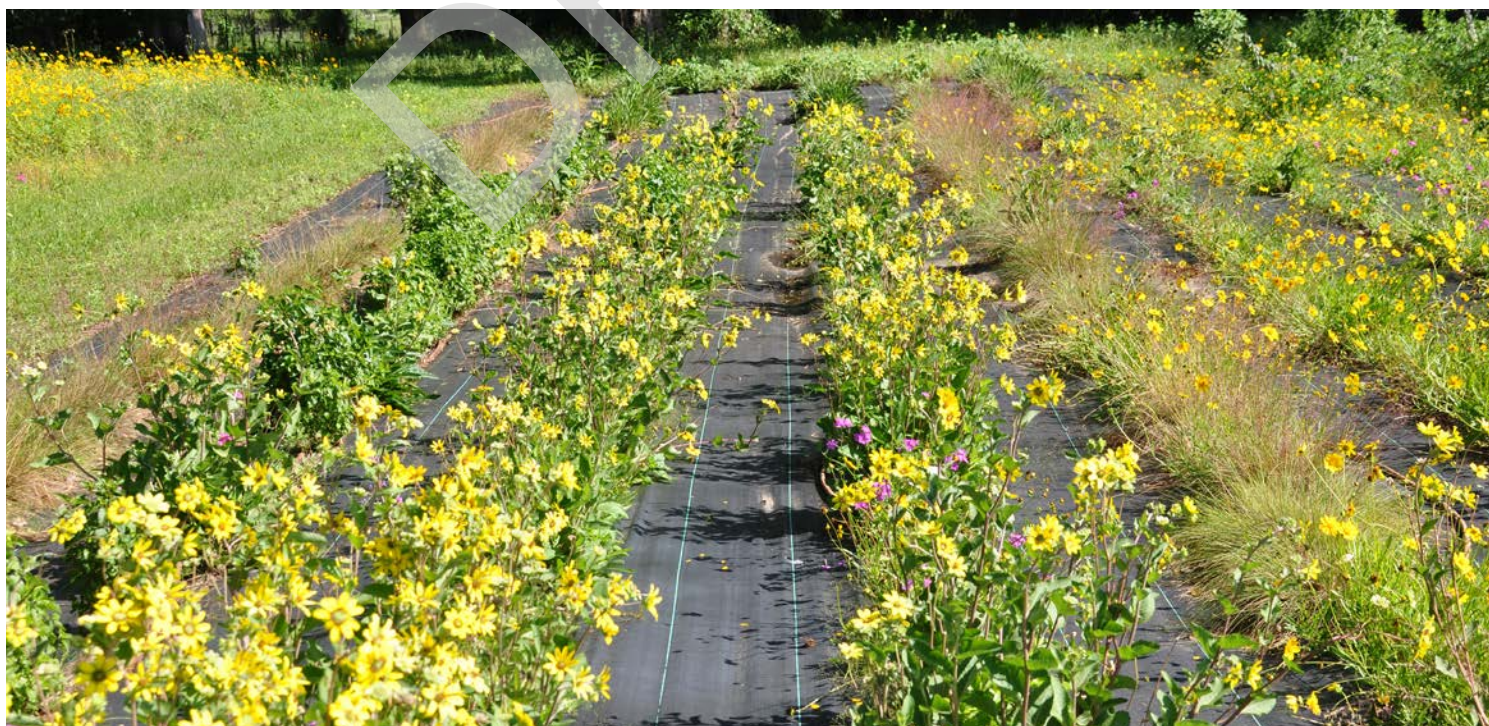
This position requires expertise in plant propagation, seed technology and farm management principles, as well as the ability to effectively supervise staff and volunteers. The Plant Materials Nursery and Seed Farm Manager plays a critical role in ensuring the availability of essential plant materials for research, restoration and conservation efforts, directly contributing to the success of the Florida Native Seed Partnership.

Farm Manager Support

This position will provide essential, hands-on support to the farm manager, assisting with day-to-day operations of seed collection, production, storage and distribution. The role plays an integral part in ensuring the success of high-quality, regionally appropriate native seed supply by supporting both the logistical and practical needs of the seed production process.

Key responsibilities include assisting with purchase orders and procurement of materials and equipment, coordinating with growers and suppliers, and helping to maintain accurate records of inventory and distribution activities. The individual in this role will also support field-based tasks such as seed collection, sowing, harvesting and cleaning, and help implement best practices for seed storage and quality control.

By working closely with the Farm Manager and other members of the seed network, this position helps ensure that Florida's native seed resources are sustainably produced, properly stored, and effectively distributed to support ecological restoration and conservation goals statewide.



Financial Plan

Funding Sources

- **IFAS state budget:** This funding would support the Plant Materials Nursery and Seed Farm at IFAS and associated positions.
- **License plate revenue:** Funds from the sale and renewal of the State Wildflower license plate (via the Florida Wildflower Foundation) will support the Partnership Coordinator position and associated projects.
- **Federal grants:** Grants focused on environmental restoration, conservation, ecological research, agriculture, horticulture, climate resilience (e.g., USDA, NRCS, EPA, etc.)
- **Regional/State grants:** Grants offered by state wildlife agencies, regional conservation organizations, or state-level initiatives that focus on local ecosystems and flora
- **Corporate grants and sponsorships:** Support from corporate social responsibility programs in sectors such as agriculture, landscaping and environmental technology
- **Private foundations:** Donations or grants from environmental or conservation foundations, agriculture and rural development foundations, research and innovation foundations, community development foundations, or family foundations

Revenue Streams

- **Foundational seed sales:** Foundational native ecotype seed can be provided to native plant material producers (e.g. seed farmers, nursery growers) for purchase.
- **Educational workshops and training:** Fees for professional development/continuing education courses on native seed collection, propagation, landscape use, etc.
- **Research and development funding:** Funding for proposed targeted research projects could originate from partners.

Costs

- **Staff salaries**
- **Seed sourcing and certification**
- **Seed production**
- **Research and development**



Key Performance Indicators (KPIs)

Foundation Seed Production

The success of foundation seed production will be measured by the total quantity of seed produced at IFAS PSREU (in pounds or grams), the number of seed producers receiving foundation seed, and the documented viability and genetic diversity of the seed produced.

Partner Satisfaction

Partner satisfaction will be assessed through annual partner satisfaction surveys, tracking perceptions of communication, collaboration and support. Additional indicators include the number of active collaborations and joint projects established, and the retention rate of partner organizations within the partnership. Efforts will also be made to assess the inclusiveness and equity of partner participation.



Research, Extension and Teaching Outputs

Research outputs will be tracked through multiple metrics, including the number of studies published in peer-reviewed journals; the development and distribution of Florida-specific planting guides and best management practices; the number of completed genetic analyses and common garden studies; and the number of acres restored using researched methods.

Teaching and training impacts will be measured by the number of students trained, student credit hours generated, and participation in research or field-based learning opportunities. Extension and outreach outputs will include the number and type of outreach products produced (e.g., fact sheets, videos, presentations), as well as analytics such as website traffic, social media engagement, and distribution metrics for educational materials.

Financial Performance

Financial performance will be evaluated by the amount of grant funding secured from state, federal and private sources; total donations raised from individuals and organizations; seed sales revenue generated by participating producers; and the cost effectiveness of seed production. Additional indicators may include return on investment, funding diversification, leveraged or matching funds, producer profitability, and adherence to budget. The balance between administrative and programmatic costs will also be monitored to assess financial sustainability.

Public Engagement

Public engagement will be measured by the number of participants in educational workshops, training programs and events; website traffic and unique visitor counts; and social media engagement metrics (including followers, likes, shares and comments). Additional indicators include the number of municipalities and public agencies incorporating native seeds into projects, the total acres converted to native plantings, and the number of private landowners using native seeds.

Engagement success will also be assessed through metrics such as the number of outreach materials distributed or downloaded, earned media coverage, participant feedback, and the number of new partnerships formed as a result of outreach activities.



Risk Assessment: Potential Risks and Mitigation Strategies

Market fluctuations

Demand for native seeds may vary due to economic conditions.

Mitigation strategy: Develop partnerships with corporate sponsors and municipalities to secure long-term financial support and create stable markets for native seeds.

Funding shortfalls

Insufficient grant or donor funding could slow project expansion.

Mitigation strategy: Diversify funding sources by actively pursuing a range of funding sources, including grants from state and federal agencies, private foundations, corporate sponsorships and individual donations, to reduce reliance on any single funding source.

Climate impact

Climate variability could affect seed viability and production.

Mitigation strategy: Invest in research to improve seed resilience, develop drought-tolerant varieties, and explore innovative seed production techniques



Regulatory changes

Changes in environmental regulations or land use policies could impact seed collection, production and restoration efforts.

Mitigation strategy: Actively monitor regulatory developments and engage with policymakers to advocate for policies that support native seed production and restoration.

Supply chain disruptions

Unexpected challenges such as disease outbreaks, pest infestations or logistical issues could affect seed availability and quality.

Mitigation strategy: Establish a seed reserve to buffer against supply chain disruptions and create contingency plans for extreme weather events, disease outbreaks and pests.

Lack of producer participation

Insufficient participation from seed producers could constrain supply and hinder industry growth.

Mitigation strategy: Provide producer incentives such as cost-sharing programs, technical assistance and market access support to encourage producer engagement.

Knowledge gaps

Insufficient research or limited knowledge transfer could reduce the effectiveness of restoration efforts and best management practices.

Mitigation strategy: Develop and distribute educational materials, conduct workshops, and provide technical assistance to improve knowledge transfer and promote best management practices.

Genetic diversity loss

Inadequate seed collection and propagation practices could reduce genetic diversity in native plant populations.

Mitigation strategy: Implement and enforce seed collection and propagation protocols that prioritize genetic diversity conservation.



Implementation Timeline (Five-Year Plan)

Year 1: Foundation Building and Assessment

- Establish core partners with state agencies, NGOs and private sector, and complete state-wide inventory of seed producers and stakeholders. (1.1)
- Conduct a detailed seed industry market analysis and demand forecasting. (1.2)
- Develop a prioritized list of high-value, ecologically significant native species. (1.3)
- Begin development of the Florida Native Seed Production Manual. (2.1)
- Start foundation seed production at IFAS PSREU. (2.2)
- Begin curriculum development for the seed producer training program. (2.3)
- Begin development of the FNSP website and digital platform. (5.1)
- Establish the steering committee and initial working groups. (5.2)
- Develop the comprehensive communication plan. (5.3)
- Establish the monitoring and evaluation framework. (5.4)

Year 2: Capacity Building and Research Initiation

- Publish and distribute the initial Florida Native Seed Production Manual. (2.1)
- Launch the initial seed producer training program. (2.3)
- Begin the working group for public land harvesting guidelines. (2.5)
- Begin developing the online market interface. (2.4)
- Initiate applied research on key “workhorse” species. (3.2)
- Begin genetic analyses and common garden studies. (3.3)
- Establish a centralized repository of research. (3.4)
- Begin development of the conservation seed banking program. (3.5)
- Begin developing targeted outreach and education campaigns. (4.1)
- Begin developing economic incentive programs. (4.2)
- Conduct the first annual review of progress. (5.5)

Year 3: Market Development and Advanced Research

- Begin supporting regional seed producer cooperatives. (4.3)
- Begin developing market strategies for municipalities and agencies. (4.4)
- Begin developing the “Florida Native Seed” branding and certification programs. (4.5)
- Launch initial outreach campaigns to end-users. (4.1)
- Initiate applied research to improve production efficiency. (3.6)
- Begin developing and disseminating best management practices. (3.7)

- Establish initial seed banking protocols. (3.5)
- Launch the online interface. (2.4)
- Publish initial public land harvesting guidelines. (2.5)
- Begin certification of seed producers. (2.3)
- Conduct mid-year evaluation of KPIs. (5.4)
- Conduct the second annual review of the partnership and progress. (5.5)

Year 4: Expansion and Refinement

- Continue all ongoing programs and activities.
- Focus on expanding market reach and increasing seed production capacity.
- Refine research and training programs based on feedback and evaluation.
- Begin to expand the amount of seed production at IFAS PSREU.

Year 5: Sustainability and Legacy

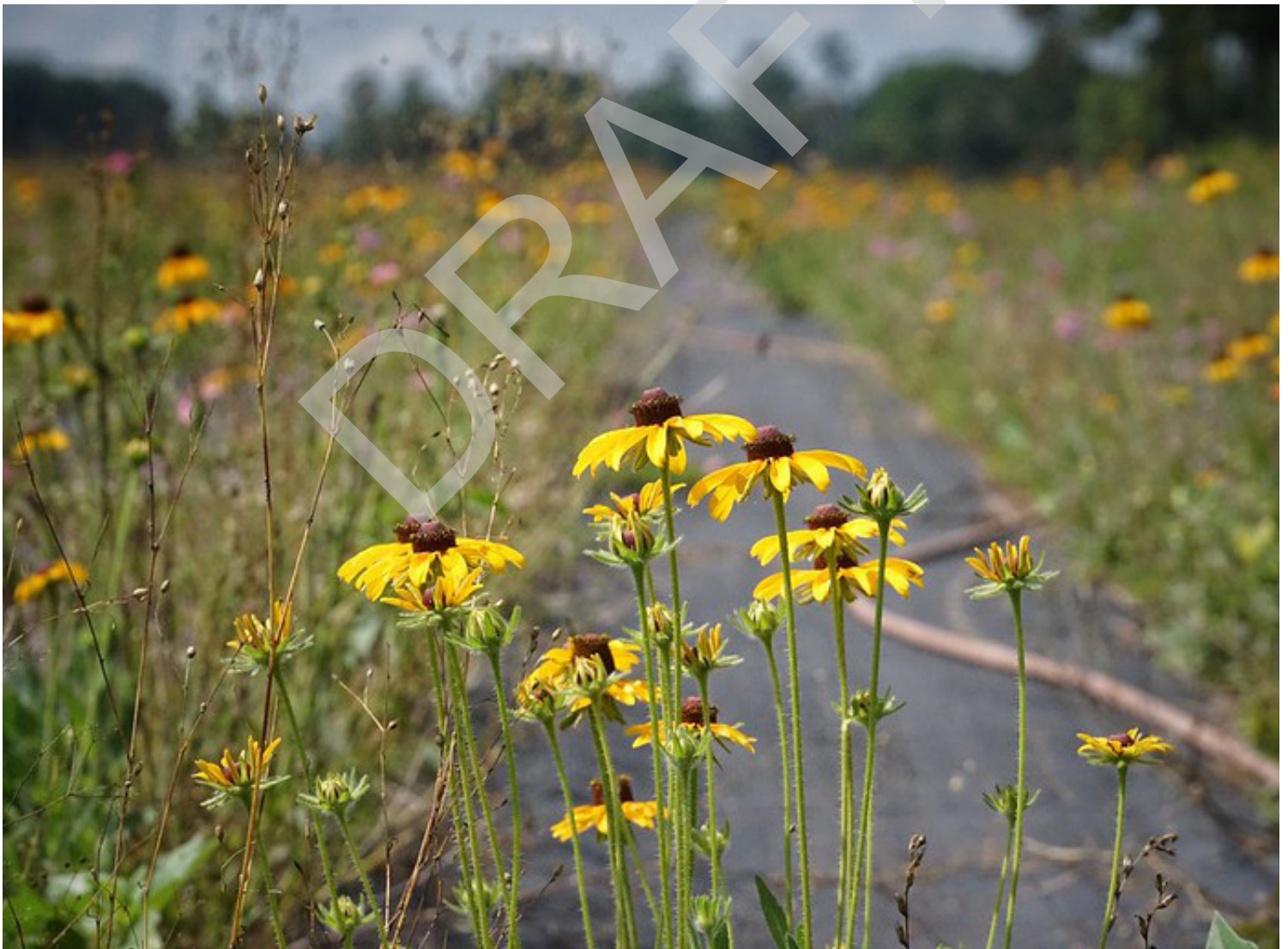
- Focus on ensuring the long-term sustainability of the FNSP.
- Develop a plan for ongoing funding and partnership management.
- Conduct a comprehensive evaluation of the FNSP's impact.
- Publish a long-term plan for the IFAS PSREU production site.
- Host a partnership-wide conference to disseminate the findings of the 5-year plan.



Conclusion

The Florida Native Seed Partnership presents a significant opportunity to drive both ecological and economic growth in Florida by establishing a sustainable native seed supply chain. By addressing the critical need for a robust and sustainable seed supply, the FNSP will empower seed producers, drive innovation and cultivate a thriving market for ecologically appropriate seeds. Through collaborative efforts, strategic research and targeted outreach, the partnership aims to ensure the widespread availability of high-quality native seeds for restoration, conservation and landscaping projects across the state.

The success of the FNSP will have far-reaching benefits, contributing to the resilience of Florida's natural habitats against climate change, invasive species and habitat loss. By restoring native plant communities, the partnership will enhance biodiversity, support pollinators and improve water quality, and ultimately strengthen both the ecological and economic well-being of Florida. Through the implementation of this strategic plan, the FNSP is poised to create a lasting legacy, ensuring that Florida's landscapes will flourish with native flora for generations to come.



Appendix: Focus Uses and Habitats

Restoration and Mitigation

Pine savannas and Woodlands

Pine savannas and woodlands in Florida are ecologically vital ecosystems, characterized by open pine canopies and a diverse understory of grasses and forbs. These ancient, fire-maintained habitats are crucial for biodiversity, supporting numerous endemic and threatened species. However, historical logging, development and fire suppression have led to a significant decline in these communities, creating a substantial demand within the restoration and mitigation industry to recover these valuable landscapes.

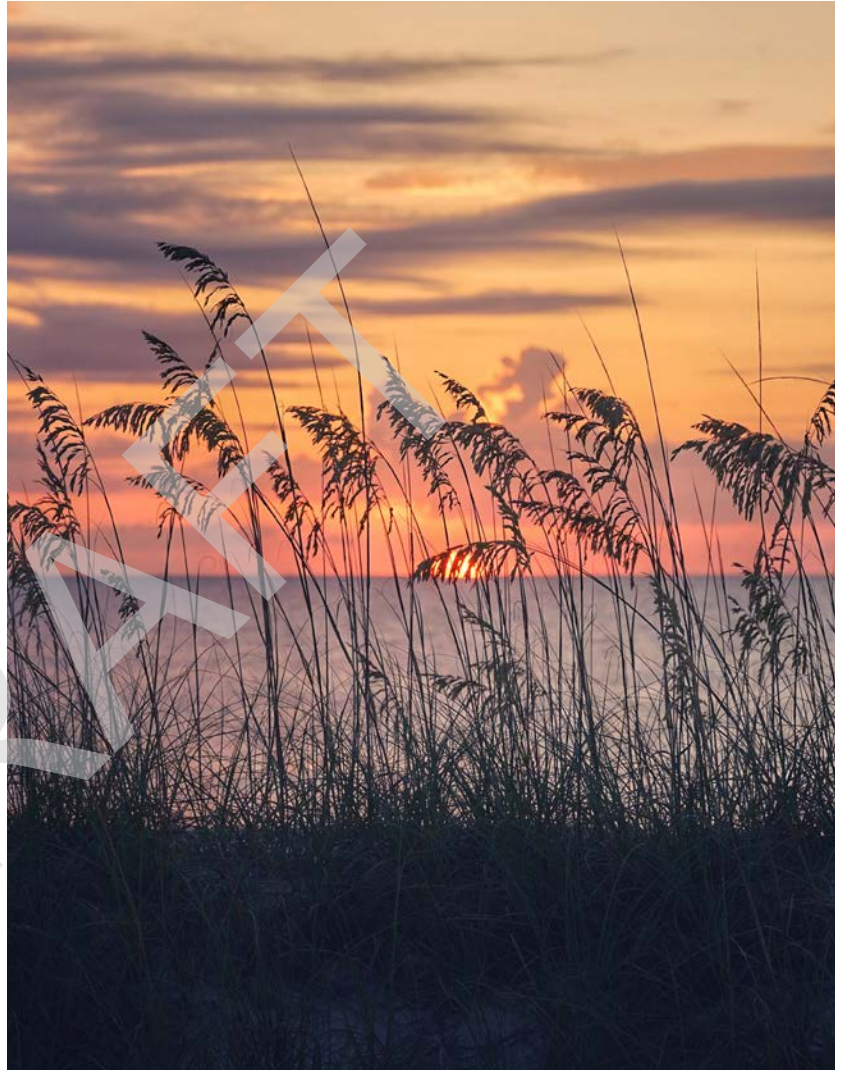
The native seed industry plays a critical role in pine savanna restoration. High-quality, locally sourced native seeds are essential for re-establishing the diverse understory that defines these habitats. Specifically, seeds of native graminoids like wiregrass, along with a variety of forbs, are needed to create a resilient and functional ecosystem. The availability of these seeds directly impacts restoration success, influencing biodiversity, soil health and wildlife habitat. Expanding and strengthening Florida's native seed industry is paramount to supporting pine savanna restoration and mitigation efforts, ensuring the long-term health and resilience of these unique and valuable ecosystems.



Wetlands

Florida's wetlands are incredibly diverse and ecologically significant, encompassing a range of habitats from freshwater marshes and swamps to coastal mangrove forests. These wetlands provide critical ecosystem services, including water filtration, flood control and habitat for a vast array of plant and animal species. However, extensive degradation due to drainage, development and pollution has created an urgent need for restoration and mitigation efforts.

The native seed industry is critical for successful wetland restoration in Florida. Native wetland plant species, such as various sedges, rushes and aquatic forbs, are essential for restoring hydrological functions and biodiversity. Locally sourced seeds ensure genetic adaptation and ecological compatibility, making them crucial for long-term restoration projects. The availability of diverse wetland seed mixes directly influences the success of restoration projects, impacting water quality, habitat structure, and the recovery of native plant communities. Strengthening Florida's native seed industry to supply high-quality wetland seeds is fundamental to supporting wetland restoration and mitigation initiatives, safeguarding these vital ecosystems for future generations.



Coastal

Florida's coastal ecosystems, encompassing sandy beaches, dunes, salt marshes and mangrove forests, are dynamic environments that provide essential protection against erosion and storm surge, while also supporting a rich array of marine and terrestrial life. These ecosystems face increasing threats from sea-level rise, coastal development and invasive species, making restoration and mitigation efforts crucial for their preservation.

The native seed industry plays a key role in restoring and stabilizing coastal ecosystems. Native plant species, such as sea oats, dune sunflowers and salt-tolerant grasses, are vital for stabilizing sand dunes and restoring salt marshes. Locally sourced seeds are essential for ensuring the genetic adaptability of these plants to the challenging coastal environment. The

availability of diverse coastal seed mixes directly impacts the success of restoration projects, influencing shoreline stability, habitat quality and the resilience of coastal communities. A strong and reliable native seed industry is indispensable for supporting coastal ecosystem restoration and mitigation efforts in Florida, safeguarding these valuable natural defenses against the impacts of climate change and development.



Rangelands

Florida's rangelands, historically characterized by expansive native grasslands and scattered woodlands, have been a cornerstone of the state's agricultural heritage, particularly cattle ranching, a vital economic and cultural component. However, much of the land dedicated to cattle production has been converted to non-native "improved" pastures, severely limiting wildlife habitat and ecological diversity. Recognizing this, Florida is actively purchasing cattle ranches to establish a statewide wildlife corridor, aiming to reconnect fragmented habitats. Additionally, there is growing interest in restoring these areas to native rangeland vegetation, utilizing high-protein native grasses that offer dual benefits: improved forage for cattle, enhanced habitat for game species like turkey, quail and doves, and a boost in overall wildlife diversity.

The native seed industry plays a critical role in these restoration efforts. Locally sourced seeds of native grasses, adapted to Florida's specific climate and soil conditions, are essential for successfully converting land back to native rangeland. The availability of diverse seed mixes directly impacts the success of these projects, influencing forage production, wildlife habitat and watershed protection. A robust native seed industry, capable of supplying high-quality rangeland seeds, is essential for supporting sustainable cattle ranching practices, contributing to the creation of the wildlife corridor, and restoring the ecological integrity of these valuable landscapes. By promoting the use of native seeds in rangeland management and restoration, the industry can support both the economic viability of cattle ranching and the state's critical conservation goals.

Reclamation

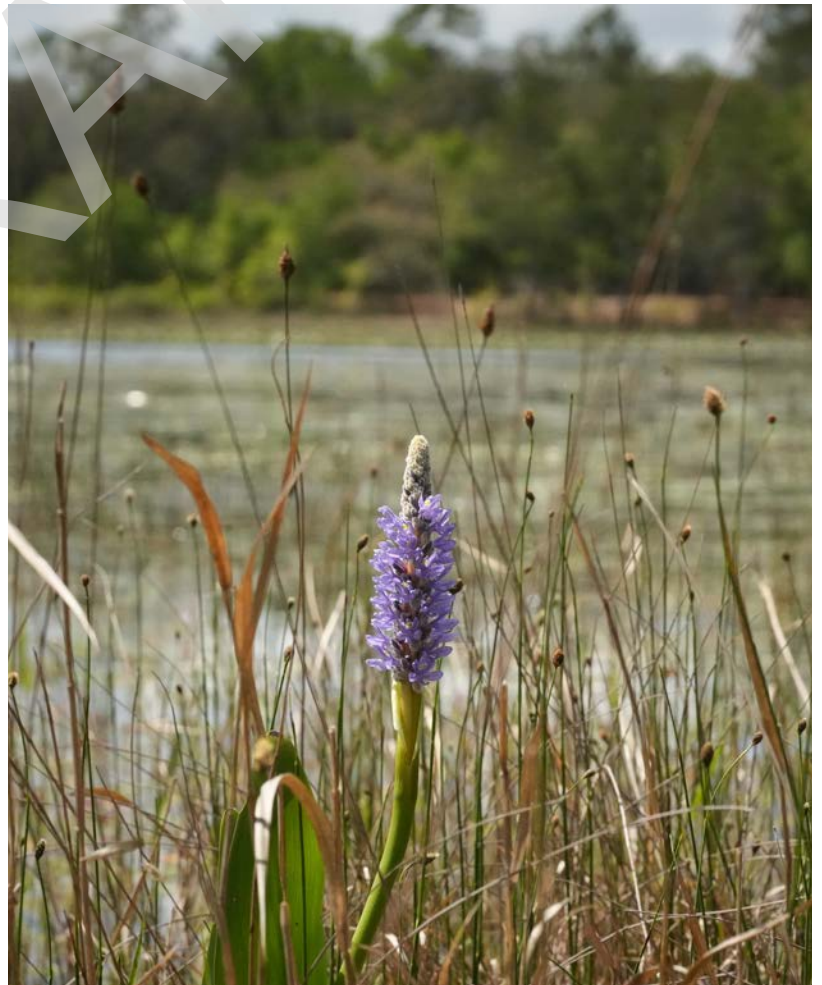
Mining

Phosphate mining in Florida, while economically significant, results in drastically altered landscapes that require extensive reclamation. These areas, once diverse ecosystems, are transformed into large open pits and overburden piles, presenting significant challenges for ecological restoration. Florida's regulations mandate reclamation efforts aimed at restoring mined lands to productive and ecologically functional habitats. However, the scale and complexity of these projects necessitate a specialized approach.

The native seed industry plays a pivotal role in the successful reclamation of phosphate mining sites. Re-establishing native plant communities is essential for stabilizing soils, preventing erosion and restoring biodiversity. Locally sourced seeds of native grasses, legumes and forbs, adapted to the post-mining soil conditions, are crucial for creating resilient and self-sustaining ecosystems. Reclamation projects often require large quantities of diverse seed mixes to cover extensive areas, making a reliable and robust native seed supply indispensable. Research is needed to identify the most effective native species and seed mixes for specific reclamation challenges, such as altered soil chemistry and hydrology. As Florida continues to balance economic development with environmental stewardship, the native seed industry's capacity to provide high-quality seeds and support research-driven reclamation practices is essential for mitigating the ecological impacts of phosphate mining and restoring these landscapes to their former ecological value.

Water Recharge

Florida's increasing urbanization and changing climate patterns have heightened the need for effective stormwater management and water recharge projects. These initiatives are crucial for mitigating flooding, improving water quality, and replenishing groundwater supplies, which are essential for both human consumption and ecosystem health. While traditional stormwater management often relies on engineered solutions that prioritize rapid drainage, nature-based solutions are increasingly recognized for their multiple benefits, including enhanced biodiversity and improved water quality.



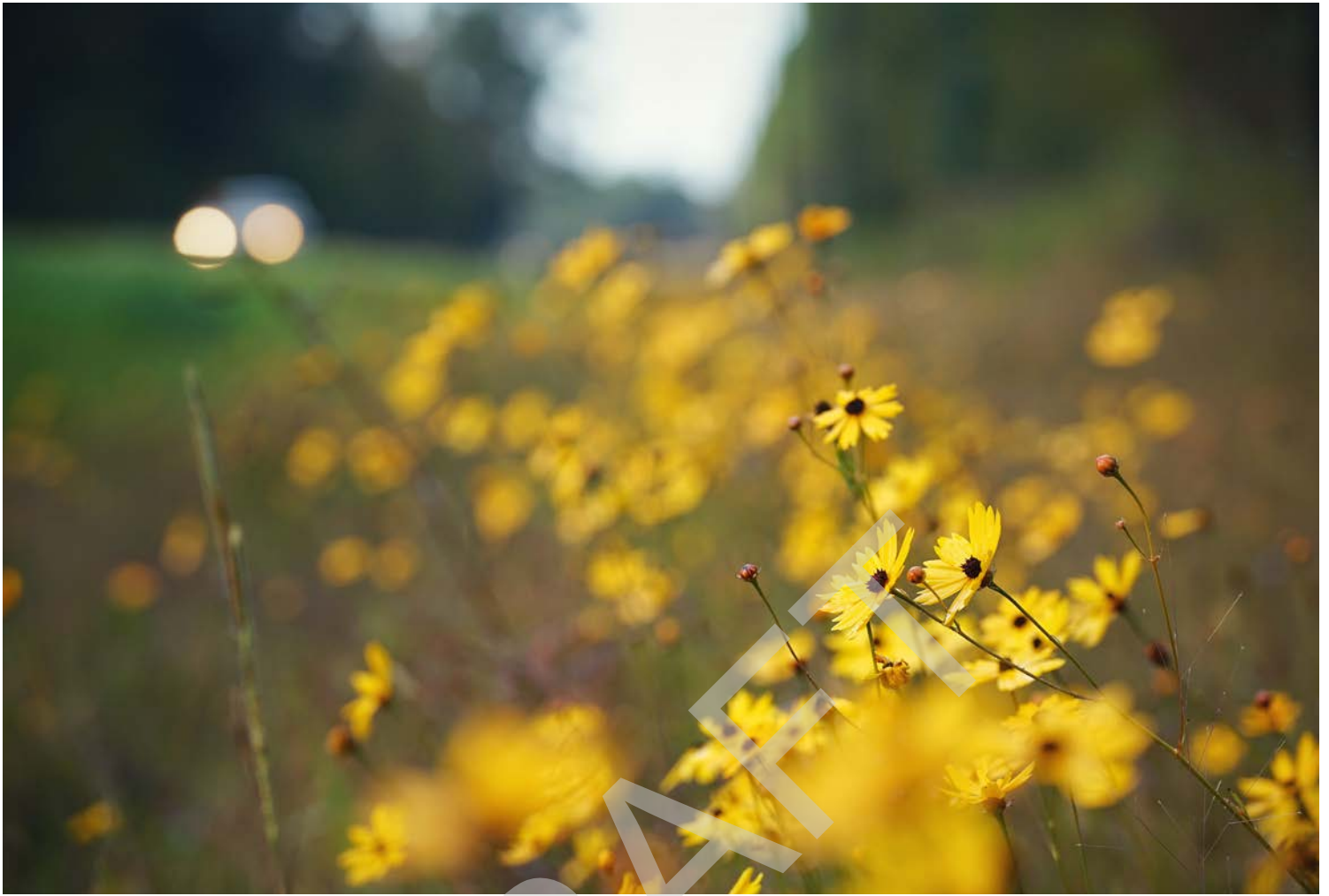
The native seed industry is a vital component of successful stormwater and water recharge projects. Native plant species, adapted to Florida's specific hydrological conditions, play a critical role in these efforts. Native grasses, sedges and forbs can stabilize soils, increase infiltration and filter pollutants from stormwater runoff. Using diverse native seed mixes in bioswales, retention ponds and constructed wetlands enhances the ecological function of these projects, creating habitat for pollinators and other wildlife. Locally sourced seeds are essential for ensuring the adaptability and resilience of these plant communities. Research is needed to identify the most effective native species and seed mixes for specific stormwater management and water recharge applications. As Florida continues to face water resource challenges, the native seed industry's capacity to provide high-quality seeds and support research-driven solutions is crucial for creating sustainable, ecologically sound stormwater management and water recharge projects.

Ecological Enhancement

Meadows and Roadsides

The growing interest in establishing wildflower meadows in both rural and urban Florida landscapes, alongside the potential for ecological enhancement along roadsides and highways, reflects a desire to enhance biodiversity, support pollinators and create aesthetically pleasing environments. In rural areas, meadows contribute to agricultural landscapes by providing habitat for beneficial insects and diversifying forage options. In





urban settings, meadows offer pockets of natural beauty and ecological function within otherwise developed areas, serving as vital refuges for pollinators and contributing to urban greening initiatives. Roadside and highway verges, often overlooked, represent vast linear landscapes that can be transformed into valuable habitats. However, the unique challenges of these environments, such as poor soil conditions, exposure to pollutants, and frequent mowing, require a specialized approach.

The native seed industry is fundamental to the establishment and long-term success of these projects. Using locally sourced native seeds ensures the plants are adapted to the specific climate and soil conditions, promoting higher survival rates and lower maintenance needs. Diverse seed mixes, including drought-tolerant grasses and flowering forbs, are essential for creating meadows and roadside habitats that provide continuous blooms and support a wide range of pollinators and wildlife. In rural areas, native meadows can be integrated into agricultural landscapes to improve soil health and enhance wildlife habitat. In urban areas, meadows can transform vacant lots, parks and roadside verges into vibrant ecological spaces. Along roadsides and highways, native plant communities can help stabilize soils, reduce erosion and enhance the aesthetic appeal of these linear landscapes. As the demand for sustainable landscaping, pollinator habitat and ecological infrastructure grows, the native seed industry's capacity to provide high-quality, diverse seed mixes is essential for creating thriving, resilient meadows and roadside habitats throughout Florida.

Energy Industry

The rapid expansion of solar farms in Florida presents a unique opportunity to integrate ecological restoration and habitat enhancement into renewable energy development. While these large-scale installations are crucial for transitioning to clean energy, they often involve significant land disturbance, necessitating careful vegetation management. Utilizing native seed mixes in solar farm understory plantings offers a sustainable and ecologically sound approach, transforming these sites into valuable habitats.

Native seed mixes, specifically tailored to Florida's diverse ecosystems, can establish pollinator-friendly understory vegetation within solar farm arrays. This approach enhances biodiversity by supporting beneficial insects like bees and butterflies, while also contributing to soil health, reducing erosion, and minimizing stormwater runoff. By selecting native species adapted to local conditions, solar farms can create resilient plant communities that require minimal maintenance, reducing long-term operational costs.

Additionally, the integration of native plantings can enhance the aesthetic appeal of

solar farms, transforming them from industrial sites into visually pleasing landscapes. By demonstrating a commitment to environmental stewardship, solar energy companies can foster positive relationships with local communities and stakeholders. The native seed industry's capacity to provide diverse, locally sourced seed mixes, combined with research into appropriate species for these environments, is essential for maximizing the ecological benefits of solar farm development in Florida.



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